

## MR-1 CHECK OFF LIST FOR NON-CATEGORICAL COMPANIES

ST. MARY'S HOSPITAL

26210045  
~~#26210003~~

1. Month of APRIL 1, 2008 THRU APRIL 30, 2008

- |     |  |                                    |                                    |     |
|-----|--|------------------------------------|------------------------------------|-----|
| 2.  | Is Outlet # (8 digit) Correct?   | <input checked="" type="radio"/> Y | N                                  | N/A |
| 3.  | Is average Total flow-gal.day stated in space provided?                    | <input checked="" type="radio"/> Y | N                                  | N/A |
| 4.  | Is max. Total flow-gal day stated in space provided?                       | <input checked="" type="radio"/> Y | N                                  | N/A |
| 5.  | Is method used to calculate water stated?                                  | <input checked="" type="radio"/> Y | N                                  | N/A |
| 6.  | Are number of working days stated?   | <input checked="" type="radio"/> Y | N                                  | N/A |
| 7.  | Are there any parameters which have exceeded PVSC Local Limits?            | <input checked="" type="radio"/> Y | <input checked="" type="radio"/> N | N/A |
| 8.  | Is proper compliance/non-compliance statement provided?                    | <input checked="" type="radio"/> Y | N                                  | N/A |
| 9.  | Have correct number of samples been submitted?                             | <input checked="" type="radio"/> Y | N                                  | N/A |
| 10. | Has PHC result been listed on MR-1 report?                                 | <input checked="" type="radio"/> Y | <input checked="" type="radio"/> N | N/A |
| 11. | Has sample number been reported in space provided?                         | <input checked="" type="radio"/> Y | N                                  | N/A |
| 12. | Have all regulated parameters been listed on MR-1?                         | <input checked="" type="radio"/> Y | N                                  | N/A |
| 13. | Has sample type been stated on MR-1?                                       | <input checked="" type="radio"/> Y | N                                  | N/A |
| 14. | Have all samples been taken during this reporting period?                  | <input checked="" type="radio"/> Y | N                                  | N/A |
| 15. | Has NJDEPE certified lab been used?  | <input checked="" type="radio"/> Y | N                                  | N/A |
| 16. | Have analytical results been submitted on copies of Laboratory stationery? | <input checked="" type="radio"/> Y | N                                  | N/A |
| 17. | Have results been written in space designated on MR-1?                     | <input checked="" type="radio"/> Y | N                                  | N/A |
| 18. | Is correct method used to preserve samples stated on MR-1?                 | <input checked="" type="radio"/> Y | N                                  | N/A |
| 19. | Has MR-1 been signed by authorized representative?                         | <input checked="" type="radio"/> Y | N                                  | N/A |
| 20. | Has information been submitted on proper MR-1 form?                        | <input checked="" type="radio"/> Y | N                                  | N/A |
| 21. | Remove Arsenic from report if sampling not required                        | <input checked="" type="radio"/> Y | N                                  | N/A |

MR-1 CHECK OFF LIST FOR NON-CATEGORICAL COMPANIES

First Reviewer: comments on deficiencies Complete

Date Reviewed 6/2/08 Date sent to user \_\_\_\_\_

Date due back \_\_\_\_\_ Reviewer J. Adams

Second review comments on deficiencies \_\_\_\_\_

Date Reviewed \_\_\_\_\_ Date sent to user \_\_\_\_\_

Date due back \_\_\_\_\_ Reviewer \_\_\_\_\_

Date \_\_\_\_\_ Reviewer \_\_\_\_\_

Te

## PRETREATMENT MONITORING REPORT

NAME : ST. MARY'S HOSPITAL

MAILING ADDRESS: 350 Boulevard, Passaic, NJ 07055

FACILITY LOCATION: 350 Boulevard, Passaic, NJ 07055

CATEGORY & SUBPART: 460

OUTLET #: 1

CONTACT OFFICIAL: Martin Romanik

TELEPHONE #: (973) 365-5134

NEW CUSTOMER ID/ OUTLET ID: 26210045

OLD OUTLET DESIGNATION: 26210003

MONITORING RECORD					
START			END		
4	1	2008	4	30	2008
MO.	DAY	YR.	MO.	DAY	YR.

Regulated Flow-gal/day

Total Flow-gal/day

**Average**

N/A

258,445

**Maximum**

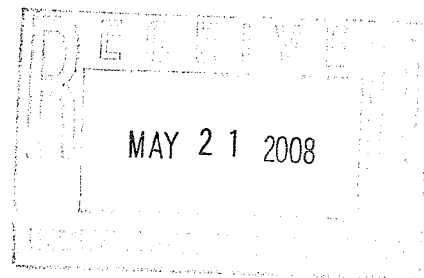
N/A

284,290

Method Used: Meter Readings Divided by **30** days.

Production Rate (if applicable)

[illegible]



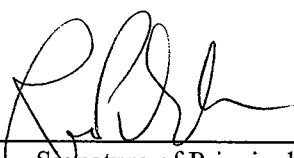
Certification of Non-use if applicable (use additional sheets): N/A

Compliance or non-compliance statement with compliance schedule (use additional sheets if necessary for every parameter used. PBI Regional Medical Center Hospital is in compliance with the PVSC local limits

Explain Method for preserving samples: Laboratory preserved with 5ml nitric acid to a pH of <2

**I certify under penalty of law that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.**

403.6(a)(2)(ii) revised by 53 FR 40610, October 17, 1988

  
\_\_\_\_\_  
Signature of Principal  
Executive or Authorized Agent

Joseph W. Pilewski

Vice President Enviro-Sciences, Inc  
\_\_\_\_\_  
Type Name and Title

20-May-08  
\_\_\_\_\_  
Date

Water Discharge Calculation Sheet

ST. MARY'S HOSPITAL (PBI)

APRIL 2008

Total water used from meter reading (Cubic feet)	1,091,100
x 7.48 (gallons / cubic foot)	
Total Usage (Gallons)	8,161,428
Evaporation (Gallons) 5% evaporation *	408,071
Volume Discharged (Gallons)	7,753,357

Volume Discharged For Month	
Daily Average Discharge (Gallons)	258,445
Daily Maximum Discharge (Gallons)	284,290

Month 4  
Last day 30

\* NOTE: In the months of January, February and March the PVSC DOES NOT ALLOW a reduction for evaporation.

70027224	70027225	70029946	60144298			
<u>Meter 1</u>	<u>Meter 2</u>	<u>Meter 3</u>	<u>Meter 4</u>	<u>Total</u>	<u>x 100</u>	<u>x 7.48</u>
1,434	1,728	7,609	140	10,911	1,091,100	8,161,428

	<u>Reading Date</u>		<u>CF1</u>	<u>CF2</u>	<u>Consumption (100 cu.ft.)</u>
Meter 1	5/13/08		1,286.00	1,534.00	
	4/14/08		252.00	1,530.00	
		C - L	1,034.00	4.00	
			x 1	x 100	
			1,034.00	400.00	1,434.00
Meter 2	5/13/08		7,052.00	1,170.00	
	4/14/08		6,024.00	1,163.00	
		C - L	1,028.00	7.00	
			x 1	x 100	
			1,028.00	700.00	1,728.00
Meter 3	5/13/08		9,702.00	7,297.00	
	4/14/08		1,173.00	7,389.00	
		C - L	8,529.00	-92.00	
			x 1	x 10	
			8,529.00	-920.00	7,609.00
Meter 4	5/13/08		2,250.00		
	4/14/08		2,236.00		
		C - L	14.00		
			x 10		
			140.00		140.00



**ANALYTICAL DATA REPORT**

ESI, INC.  
111 Howard Blvd  
Suite 108  
Mount Arlington, NJ 07856

Project Name: **ST. MARY'S HOSPITAL (PBI)-R8MM**  
IAL Case Number: **E08-03655**

These data have been reviewed and accepted by:

A handwritten signature in black ink, appearing to read "Michael Leftin". The signature is written over a horizontal line.

Michael H. Leftin, Ph.D.  
Laboratory Director

273 Franklin Road  
Randolph, NJ 07869  
Phone: 973 361 4252  
Fax: 973 989 5288



IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

## Sample Summary

*IAL Case No.***E08-03655***Client* ESI, INC.*Project* ST. MARY'S HOSPITAL (PBI)-R8MM*Received On* 4/ 3/2008@11:50

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Depth Top/Bottom</u>	<u>Sampling Time</u>	<u>Matrix</u>	<u># of Container</u>
03655-001	SMP-0408	n/a	4/ 3/2008@09:25	Aqueous	1

**INTEGRATED ANALYTICAL LABORATORIES, LLC.****TABLE OF CONTENTS**

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Metals	6
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Calibration Summary	
Spike Sample Results Summary	
Duplicate Sample Results Summary	
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\* Methodology is included in the IAL Project Information Page



**INTEGRATED ANALYTICAL LABORATORIES, LLC.****MATRIX QUALIFIERS**

- A -** Indicates the sample is an Aqueous matrix.
- O -** Indicates the sample is an Oil matrix.
- S -** Indicates the sample is a Soil, Sludge or Sediment matrix.
- X -** Indicates the sample is an Other matrix as indicated by Client Chain of Custody.

**DATA QUALIFIERS**

- B -** Indicates the analyte was found in the Blank and in the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of the analyte.
- C -** Common Laboratory Contaminant.
- D -** The compound was reported from the Diluted analysis.
- D.F. -** Dilution Factor.
- E -** Estimated concentration, reported results are outside the calibrated range of the instrument.
- J -** Indicates an estimated value. The compound was detected at a value below the method detection limit but greater than zero. For GC/MS procedures, the mass spectral data meets the criteria required to identify the target compound.
- MDL -** Method Detection Limit.
- MI -** Indicates compound concentration could not be determined due to Matrix Interferences.
- NA -** Not Applicable.
- ND -** Indicates the compound was analyzed for but Not Detected at the MDL.

**REPORT QUALIFIERS**

All solid sample analyses are reported on a dry weight basis.

All solid sample values are corrected for original sample size and percent solids.

- Q -** Qualifier

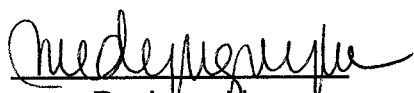
0001

**INTEGRATED ANALYTICAL LABORATORIES, LLC.****CONFORMANCE / NONCONFORMANCE SUMMARY**

Integrated Analytical Laboratories, LLC. received one (1) aqueous sample(s) from ESI, INC.  
(Project: ST. MARY'S HOSPITAL (PBI)-R8MM) on April 3, 2008 for the analysis of:

(1) Metal - Zinc

A review of the QA/QC measures for the analysis of the sample(s) contained in this report  
has been performed by:

  
Reviewed by

4/17/08  
Date

0002

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

## LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E08-03655

	Check If Complete
1. Cover Page, Title Page listing Lab Certification #, facility name & address and date of report preparation.	<u>✓</u>
2. Table of Contents.	<u>✓</u>
3. Summary Sheets listing analytical results for all targeted and non-targeted compounds.	<u>✓</u>
4. Summary Table cross-referencing Field ID's vs. Lab ID's.	<u>✓</u>
5. Document bound, paginated and legible.	<u>✓</u>
6. Chain of Custody.	<u>✓</u>
7. Methodology Summary.	<u>✓</u>
8. Laboratory Chronicle and Holding Time Check.	<u>✓</u>
9. Results submitted on a dry weight basis (if applicable).	<u>✓</u>
10. Method Detection Limits.	<u>✓</u>
11. Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP.	<u>✓</u>
12. NonConformance Summary.	<u>✓</u>

  
QC Reviewed by

4/17/08  
Date

00003

**INTEGRATED ANALYTICAL LABORATORIES  
CONFORMANCE/NONCONFORMANCE SUMMARY  
METAL ANALYSIS**

Lab Case Number: E08-03655

	<u>No</u>	<u>Yes</u>
1. Calibration Summary Meet Criteria.	<u>          </u>	<u>✓</u>
2. ICP Interference Check Sample Results Meets Criteria (if applicable)	<u>          </u>	<u>NA</u>
3. Serial Dilution/Post Spike Summary Submitted (if applicable) / Meets Criteria	<u>          </u>	<u>✓</u>
4. Internal Standards Meet Criteria (if applicable)	<u>          </u>	<u>✓</u>
5. Laboratory Control Sample Summary Submitted (if applicable) / Meets Criteria	<u>          </u>	<u>✓</u>
6. Blank Contamination: If yes, list compounds and concentrations in each blank:	<u>✓</u>	<u>          </u>
<hr/>		
7. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria. (If not, list those compounds and their recoveries which fall outside the acceptable range).	<u>          </u>	<u>✓</u>
8. Extraction Holding Time Met. If not, list number of days exceeded for each sample:	<u>          </u>	<u>✓</u>
<hr/>		
9. Analysis Holding Time Met. If not, list number of days exceeded for each sample:	<u>          </u>	<u>✓</u>
<hr/>		
<hr/>		
Additional Comments:		
<hr/>		
<hr/>		

*H. Falek-Peyman*  
Inorganic Manager

April 10, 2008  
Date

0004

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

## SUMMARY REPORT

Client: ESI, INC.

Project: ST. MARY'S HOSPITAL (PBI)-R8MM

Lab Case No.: E08-03655

Lab ID: 03655-001			
Client ID: SMP-0408			
Matrix: Aqueous			
Sampled Date 4/3/08			
PARAMETER(Units)		Conc	Q MDL
Metals (Units)		(mg/L-ppm)	
Zinc		0.051	0.008

  
0005

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

## Zinc

Client/Project: ESI/ST. MARY'S HOSPITAL (PBI)-R8MM

Batch #: 160

Date Received: 04/03/08 11:50

Method: 200.8

Lab ID	Client ID	Result	Q	DF	Matrix	MDL	% Moist	Date Analyzed
03655-001	SMP-0408	0.051		1	Aqueous-mg/L	0.008	100	04/08/08

0006

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****BLANK 2 RESULTS SUMMARY**

Batch (Page) #: 160

Associated Lab 03589, 03590, 03592, 03604, 03650, 03651, 03655, 03703, 03713, 03714

Case for Blank 2: 03715, 03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03800

Matrix: Aqueous

Unit: ppb ( $\mu\text{g/L}$ )

Method: 200.8/200.7

ANALYTE	SAMPLE MDL	REAGENT BLANK
Arsenic	2.00	ND
Copper	8.00	ND
Lead	2.00	ND
Zinc	8.00	ND

0007

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION**

Batch (Page) #: 160

Lab Case: 03569, 03585, 03586, 03587, 03588, 03589, 03590, 03591, 03592, 03604, 03607, 03610

03612, 03613, 03650, 03651, 03652, 03653, 03654, 03655, 03703, 03713, 03714, 03715

03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03730, 03731, 03732, 03761

Matrix: Aqueous

Method: 200.8/200.7

Concentration/Units: ppb (µg/L)

ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Arsenic	0.500	ND	ND	ND	ND	ND	ND
Cadmium	0.250	ND	ND	ND	ND	ND	ND
Copper	2.00	ND	ND	ND	ND	ND	ND
Lead	0.500	ND	ND	ND	ND	ND	ND
Magnesium	100	ND	ND				
Mercury	0.250	ND	ND	ND	ND		
Nickel	1.00	ND	ND	ND	ND	ND	ND
Zinc	2.00	ND	ND	ND	ND	ND	ND

0008



E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION**

Batch (Page) #: 160

Lab Case: 03569, 03585, 03586, 03587, 03588, 03589, 03590, 03591, 03592, 03604, 03607, 03610

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03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03730, 03731, 03732, 03761

Matrix: Aqueous Method: 200.8/200.7 Concentration/Units: ppb (µg/L)

ANALYTE	INST. MDL	CCB	CCB	CCB	CCB	CCB	
Arsenic	0.500	ND	ND	ND	ND	ND	
Cadmium	0.250	ND	ND	ND	ND	ND	
Copper	2.00	ND	ND	ND	ND	ND	
Lead	0.500	ND	ND	ND	ND	ND	
Magnesium	100						
Mercury	0.250						
Nickel	1.00	ND	ND	ND	ND	ND	
Zinc	2.00	ND	ND	ND	ND	ND	

0009

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL**  
**INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 160

Lab Case: 03569, 03585, 03586, 03587, 03588, 03589, 03590, 03591, 03592, 03604, 03607, 03610

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03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03730, 03731, 03732, 03761

Matrix: Aqueous Method: 200.8/200.7 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	ICV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	20.0	20.7	104	20.7	104	20.6	103	20.4	102
Cadmium	0.250	10.0	9.84	98.4	9.50	95.0	9.51	95.1	9.43	94.3
Copper	2.00	50.0	48.5	97.0	48.9	97.8	47.7	95.4	46.7	93.4
Lead	0.500	10.0	9.50	95.0	9.73	97.3	9.62	96.2	9.61	96.1
Magnesium	100	10000	10630	106	9576	95.8				
Mercury	0.250	5.00	4.66	93.2	4.53	90.6	4.39	87.8	4.22	84.4
Nickel	1.00	80.0	75.5	94.4	76.2	95.3	74.7	93.4	72.7	90.9
Zinc	2.00	40.0	41.7	104	41.5	104	39.9	99.8	39.5	98.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

0010

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL**  
**INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 160

Lab Case: 03569, 03585, 03586, 03587, 03588, 03589, 03590, 03591, 03592, 03604, 03607, 03610

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03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03730, 03731, 03732, 03761

Matrix: Aqueous Method: 200.8/200.7 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	20.0	20.4	102	20.4	102	20.8	104	20.3	102
Cadmium	0.250	10.0	9.23	92.3	9.11	91.1	9.35	93.5	9.20	92.0
Copper	2.00	50.0	46.7	93.4	45.5	91.0	46.7	93.4	46.6	93.2
Lead	0.500	10.0	9.57	95.7	9.60	96.0	9.69	96.9	9.66	96.6
Magnesium	100	10000								
Mercury	0.250	5.00								
Nickel	1.00	80.0	72.2	90.3	77.1	96.4	79.1	98.9	78.7	98.4
Zinc	2.00	40.0	38.8	97.0	37.5	93.8	38.7	96.8	38.6	96.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

0011

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

# **METALS QUALITY CONTROL** **INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 160

Lab Case: 03569, 03585, 03586, 03587, 03588, 03589, 03590, 03591, 03592, 03604, 03607, 03610

03612, 03613, 03650, 03651, 03652, 03653, 03654, 03655, 03703, 03713, 03714, 03715

03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03730, 03731, 03732, 03761

Matrix: Aqueous Method: 200.8/200.7 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV		CCV		CCV			
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	20.0	21.2	106	18.4	92.0	21.4	107		
Cadmium	0.250	10.0	9.49	94.9	9.43	94.3	9.51	95.1		
Copper	2.00	50.0	48.3	96.6	46.7	93.4	47.3	94.6		
Lead	0.500	10.0	10.2	102	9.48	94.8	9.99	99.9		
Magnesium	100	10000								
Mercury	0.250	5.00								
Nickel	1.00	80.0	72.9	91.1	77.8	97.3	73.1	91.4		
Zinc	2.00	40.0	39.7	99.3	39.5	98.8	39.9	99.8		

(1) Control Limits: Mercury 80-120; Other Metals 90-110

0012

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****SPIKE SAMPLE RECOVERY**

Batch (Page) #: 160

Lab Case: 03589, 03590, 03592, 03604, 03650, 03651, 03655, 03703, 03713, 03714

03715, 03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03800

Matrix: AqueousConcentration/Units: ppb (µg/L)

ANALYTE	SSR3	SR3	%R3	SA3	SSR4	SR4	%R4	SA4	CONTROL LIMIT %R
Arsenic					416	ND	104	400	75-125
Copper	402	30.1	93.0	400	430	66.2	91.0	400	75-125
Lead	409	4.63	101	400	390	4.72	96.3	400	75-125
Nickel					357	9.20	87.0	400	75-125
Zinc	484	96.2	97.0	400	460	70.3	97.4	400	75-125

SSR = Spike Sample Result

SA = Spike Added

NC = Non-calculable % R; Sample concentration &gt; 4 x Spike Concentration.

SR = Sample Result

%R = Percent Recovery

QC Sample 3 03713-002

QC Sample 3 for following samples:

03589-002; 03590-002; 03592-001; 03604-001

03650-001; 03651-001; 03655-001; 03703-001

03713-002; 03714-001

QC Sample 4 03720-002

QC Sample 4 for following samples:

03715-001; 03716-001; 03717-001; 03718-001

03719-002; 03720-002; 03721-002; 03722-001

03727-001; 03800-001

0018

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

### METALS QUALITY CONTROL DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 160

Lab Case: 03589, 03590, 03592, 03604, 03650, 03651, 03655, 03703, 03713, 03714

03715, 03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03800

Matrix: AqueousConcentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 3	S3	D3	RPD3	CONTROL LIMIT 4	S4	D4	RPD4
Arsenic					NA	ND	ND	NC
Copper	20	30.1	31.0	2.95	20	66.2	65.4	1.22
Lead	20	4.63	4.77	2.98	20	4.72	4.74	0.423
Nickel					20	9.20	9.88	7.13
Zinc	20	96.2	98.0	1.85	20	70.3	70.1	0.285

S3 = Sample 3

D3 = Duplicate 3

NA = Not Applicable

NC = Non-calculable RPD due to result (s) less than the detection limit.

QC Sample 3 03713-002

QC Sample 3 for following samples:

03589-002; 03590-002; 03592-001; 03604-001

03650-001; 03651-001; 03655-001; 03703-001

03713-002; 03714-001

S4 = Sample 4

D4 = Duplicate 4

QC Sample 4 03720-002

QC Sample 4 for following samples:

03715-001; 03716-001; 03717-001; 03718-001

03719-002; 03720-002; 03721-002; 03722-001

03727-001; 03800-001

0014

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

# **METALS QUALITY CONTROL** **LABORATORY CONTROL SAMPLE**

Batch (Page) #: 160

Lab Case: 03569, 03585, 03586, 03587, 03588, 03589, 03590, 03591, 03592, 03604, 03607, 03610

03612, 03613, 03650, 03651, 03652, 03653, 03654, 03655, 03703, 03713, 03714, 03715

03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03730, 03731, 03732, 03761

Matrix: Aqueous

Unit: ppb (µg/L)

ANALYTE	BSW1			BSW2		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Arsenic	400	403	101	400	408	102
Cadmium	400	397	99.3			
Copper	400	389	97.3	400	380	95.0
Lead	400	378	94.5	400	388	97.0
Magnesium	8000	7660	95.8			
Mercury	10.0	10.6	106			
Nickel	400	384	96.0	400	367	91.8
Zinc	400	419	105	400	398	99.5

(1) Control Limits % Recovery = 85-115%

## BSW1

03569-001; 03591-001; 03607-001; 03610-001

03612-001; 03613-002; 03652-001; 03653-001

03798-001~002; 03585-002; 03586-002; 03587-002

03588-002~003; 03654-001; 03730-001; 03731-001

## BSW2

03589-002; 03590-002; 03592-001; 03604-001

03650-001; 03651-001; 03655-001; 03703-001

03713-002; 03714-001; 03715-001; 03716-001

03717-001; 03718-001; 03719-002; 03720-002

0015

E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

# **METALS QUALITY CONTROL** **SERIAL DILUTIONS & POST SPIKES 3**

Batch (Page) #: 160

Lab Case: 03589, 03590, 03592, 03604, 03650, 03651, 03655, 03703, 03713, 03714

Matrix: AqueousConcentration/Units: ppb (µg/L)

ANALYTE	SERIAL DILUTION		% Difference	POST SPIKE		% Recovery
	SR	SDR		SPR	SA	
Copper	30.1			360	400	82.5
Lead	4.63			344	400	84.8
Zinc	96.2			430	400	83.5

SR = Sample Result

SDR = Sample Dilution Result

SPR = Sample Post Spike Result

SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample3 : 03713-002

QC Sample 3 for following samples:

03589-002; 03590-002; 03592-001; 03604-00103650-001; 03651-001; 03655-001; 03703-00103713-002; 03714-001

0016



E08-03655

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****IPC**

Batch (Page) #: 160

Lab Case: 03569, 03585, 03586, 03587, 03588, 03589, 03590, 03591, 03592, 03604, 03607, 03610  
 03612, 03613, 03650, 03651, 03652, 03653, 03654, 03655, 03703, 03713, 03714, 03715  
 03716, 03717, 03718, 03719, 03720, 03721, 03722, 03727, 03730, 03731, 03732, 03761

Matrix: AqueousUnit: ppb (µg/L)

ANALYTE	BSW1		
	TRUE	FOUND	%R(1)
Arsenic	50.0	51.3	103
Cadmium	50.0	50.6	101
Copper	50.0	51.4	103
Lead	50.0	51.8	104
Magnesium	5000	5070	101
Mercury	2.50	2.51	100
Nickel	50.0	49.7	99.4
Zinc	50.0	48.8	97.6

(1) Control Limits = 95-105%

0017

## CHAIN OF CUSTODY

No. 3655  
(Lab Use Only)**ENVIRO-SCIENCES, INC.**111 Howard Boulevard, Suite 108  
Mount Arlington, NJ 07856  
Phone: 973-398-8183  
Fax: 973-398-8037CLIENT: ST. MARY'S HOSPITAL (PBI)PROJECT NAME: R8MMDELIVERABLES: Reduced Data DeliverablesSEND REPORT TO: Bob Lawrence E-Mail: RLawrenc@Enviro-Sciences.com

Sample Identification		Sampling Location Point	Sample Date	Sampling Time			Sample Matrix	Sample Type		Analysis Required (code #)	# of Containers
Lab	Field ID				A M	P M		Comp.	Grab		
01	SMP-0408	Process Wastewater	4/3/08	9:25			Aqueous	X		19	1

**Note: PVSC Threshold Limits Required**Method of Relinquishment: Drop OffName of Laboratory: IALRelinquished  
By: (Sign): [Signature]Received  
By: (Sign): [Signature]Date/Time: 4/3/08 11:50Relinquished To Lab  
By: (Sign): \_\_\_\_\_Received For Lab  
By: (Sign): \_\_\_\_\_

Date/Time: \_\_\_\_\_

Analysis	Code
Priority Pollutant Metals	01
Petroleum Hydrocarbons	02
Volatile Organics + 15	03
Base Neutrals + 15	04
Acid & Base / Neutrals	05
VO+15 + MTBE / TBA	06
Antimony	07
Arsenic	08
Beryllium	09

Analysis	Code
Cadmium	10
Chromium	11
Copper	12
Lead	13
Mercury	14
Nickel	15
Selenium	16
Silver	17
Thallium	18

Analysis	Code
Zinc.....	19

**Note: Report on CD NOT Required**

\\GROVE\Shared\Project Files\Hospital Group\MRI + MR2\Custody Chains\Monthly\1 month chain SMP.doc, 3/31/2008

0018

## PROJECT INFORMATION

Case No. **E08-03655**Project **ST. MARY'S HOSPITAL (PBI)-R8MM**

<b>Customer</b> ESI, INC.	<b>P.O. #</b>
<b>Contact</b> Bob Lawrence	<b>Received</b> 4/3/2008 11:50
<b>EMail</b> rlawrenc@enviro-sciences.com <input checked="" type="checkbox"/> EMail EDDs	<b>Verbal Due</b> 4/17/2008
<b>Phone</b> (973) 398-8183 <b>Fax</b> 1(973) 398-8037	<b>Report Due</b> 4/24/2008
<b>Report To</b>	<b>Bill To</b>
111 Howard Blvd	111 Howard Blvd
Suite 108	Suite 108
Mount Arlington, NJ 07856	Mount Arlington, NJ 07856
Attn: Bob Lawrence	Attn: Bob Lawrence
<b>Report Format</b> <b>Reduced</b>	
<b>Additional Info</b> <input type="checkbox"/> State Form <input type="checkbox"/> Field Sampling <input type="checkbox"/> Conditional VOA	

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Depth Top / Bottom</u>	<u>Sampling Time</u>	<u>Matrix</u>	<u>Unit</u>	<u># of Containers</u>
03655-001	SMP-0408	n/a	4/3/2008@09:25	Aqueous	mg/L	1

<u>Sample #</u>	<u>Tests</u>	<u>Status</u>	<u>QA Method</u>
001	Zinc - Zn	Run	200.8

04/03/2008 13:01 by kim - NOTE 1

IF CD APPEARS ON INVOICE, PLEASE DELETE.

## INTEGRATED ANALYTICAL LABORATORIES, LLC

## SAMPLE RECEIPT VERIFICATION

CASE NO: E 08

03655

CLIENT:

ESI

COOLER TEMPERATURE: 2° - 6°C: ☒ ( See Chain of Custody)

Comments

COC: COMPLETE / INCOMPLETE

KEY

☒ = YES/NA  
☒ = NO

- ☒ Bottles Intact
- ☒ no-Missing Bottles
- ☒ no-Extra Bottles

- ☒ Sufficient Sample Volume
- ☒ no-headspace/bubbles in VOs
- ☒ Labels intact/correct
- ☒ pH Check (exclude VOs)<sup>1</sup>
- ☒ Correct bottles/preservative
- ☒ Sufficient Holding/Prep Time<sup>1</sup>

☐ Sample to be Subcontracted

<sup>1</sup> All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY:

INITIAL

[Signature]

DATE

4/3/08

CORRECTIVE ACTION REQUIRED:

YES

☐

(SEE BELOW)

NO

☐

CLIENT NOTIFIED:

YES

☐

Date/ Time:

NO

☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY:

INITIAL

ES

DATE

4/3

REV 02/05 0020

**Laboratory Custody Chronicle****IAL Case No.****E08-03655****Client** ESI, INC.**Project** ST. MARY'S HOSPITAL (PBI)-R8MM**Received On** 4/ 3/2008@11:50**Department: Metals**

Zinc - Zn

03655-001 Aqueous

**Prep. Date**

4/ 8/08

**Analyst**

Lisa

**Analysis Date**

4/ 8/08

**Analyst**

Helge

**Review and Approval:**